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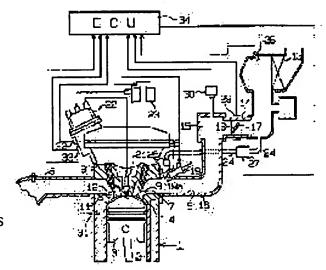
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(54) FUEL SUPPLY CONTROLLING DEVICE OF INTERNAL COMBUSTION ENGINE

## (57) Abstract:

PURPOSE: To surely prevent the air fuel ratio in transition from becoming rich while accelerating the atomization of injected fuel by means of auxiliary air supply without the use of a check valve.

CONSTITUTION: A fuel supply controlling device includes an auxiliary air passage, intake pressure sensor 30, engine speed sensor 32 throttle sensor 29, and CPU. The CPU judges whether the running state of an engine 1 is in a back flow area where air flows back in the auxiliary air passage or not. When the CPU judges that it is in a back flow area, the evaluated value of quantity of the fuel that flows back from a fuel injection value 19 to the auxiliary air passage is added along with the continuous period of back flowing running area, and when the CPU judges that it is not in a back flow area, evaluated value is reduced along with the continuous period of non-back flowing



running area, evaluating the quantity of the fuel that flows back. When throttle opening changes in the direction to close throttle, the CPU reducingly corrects fuel injection quantity according to the evaluated value of the quantity of fuel that flows back in the excessive running area of the engine 1, the changing ratio of the throttle opening of which is larger than a specified value.

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